

IN THE CLAIMS:

1. – 20 (Canceled)

21. (Original) A method of manufacturing a semiconductor device, comprising:
forming a driver circuit TFT in a driver circuit region over a substrate and a pixel TFT in a pixel region over the substrate; and
forming a first wiring over the driver circuit TFT, a second wiring over the first wiring, and a third wiring above the second wiring, and forming a first capacitor element over a drain region of the pixel TFT and a second capacitor element over the first capacitor element.

22. (Original) A semiconductor device comprising:
a driver circuit TFT formed in a driver circuit region over a substrate;
a pixel TFT formed in a pixel region over the substrate;
a first wiring formed over the driver circuit TFT;
a second wiring formed over the first wiring;
a third wiring formed over the second wiring;
a first capacitor element formed over a drain region of the pixel TFT; and
a second capacitor element formed over the first capacitor element.

23. (Original) A method of manufacturing a semiconductor device, comprising:
forming a driver circuit TFT in a driver circuit region over a substrate and a pixel TFT in a pixel region over the substrate;
forming a first interlayer insulating film over the driver circuit TFT and the pixel TFT;
forming a first contact hole in a portion of the first interlayer insulating film that is in the pixel region, the first contact hole being positioned over a drain region of the pixel TFT;
forming, from a first conductive film, a first wiring over a portion of the first interlayer insulating film that is in the driver circuit region, and forming a drain electrode in the first contact hole from the first conductive film;

forming a second interlayer insulating film over the first wiring, the drain electrode and the first interlayer insulating film;

forming a second contact hole in a portion of the second interlayer insulating film that is in the pixel region, the second contact hole being positioned over the first contact hole and the drain electrode;

forming a third interlayer insulating film over the second interlayer insulating film and in the second contact hole;

forming, from a second conductive film, a second wiring over a portion of the third interlayer insulating film that is in the driver circuit region, and forming a first capacitor electrode in the second contact hole from the second conductive film;

partially exposing the third interlayer insulating film at the bottom of the second contact hole by etching the first capacitor electrode;

forming a fourth interlayer insulating film over the second wiring, the first capacitor electrode, and the third interlayer insulating film;

forming a third contact hole in a portion of the fourth interlayer insulating film that is in the pixel region, the third contact hole being positioned over the second contact hole and the first capacitor electrode;

forming a fifth interlayer insulating film over the fourth interlayer insulating film and in the third contact hole;

partially exposing the drain electrode positioned under the bottom of the third contact hole by etching portions of the third and fifth interlayer insulating films that are at the bottom of the third contact hole; and

forming, from a third conductive film, a third wiring over a portion of the fifth interlayer insulating film that is in the driver circuit region, as well as forming a second capacitor electrode in the third contact hole from the third conductive film and electrically connecting the second capacitor electrode to the drain electrode,

wherein a first capacitor element and a second capacitor element are formed in the first through third contact holes, the first capacitor element being composed of the drain electrode, the third interlayer insulating film as a dielectric, and the first capacitor electrode, the second capacitor element being composed of the first capacitor electrode, the fifth interlayer insulating film as a dielectric, and the second capacitor electrode.

24. (Original) A method of manufacturing a semiconductor device according to claim 23, wherein electrically connecting the second capacitor electrode to the drain electrode is followed by forming a sixth interlayer insulating film over the third wiring, the second capacitor electrode, and the fifth interlayer insulating film, and forming, over a portion of the fifth interlayer insulating film that is in the pixel region, a pixel electrode that is electrically connected to the second capacitor electrode.

25. (Original) A semiconductor device, comprising:

- a driver circuit TFT formed in a driver circuit region over a substrate and a pixel TFT formed in a pixel region over the substrate;
- a first interlayer insulating film formed over the driver circuit TFT and the pixel TFT;
- a first contact hole formed in a portion of the first interlayer insulating film that is in the pixel region, the first contact hole being positioned over a drain region of the pixel TFT;
- a first wiring formed from a first conductive film over a portion of the first interlayer insulating film that is in the driver circuit region;
- a drain electrode formed in the first contact hole from the first conductive film;
- a second interlayer insulating film formed over the first wiring, the drain electrode and the first interlayer insulating film;
- a second contact hole formed in a portion of the second interlayer insulating film that is in the pixel region, the second contact hole being positioned over the first contact hole and the drain electrode;
- a third interlayer insulating film formed over the second interlayer insulating film and in the second contact hole;
- a second wiring formed from a second conductive film over a portion of the third interlayer insulating film that is in the driver circuit region;
- a first capacitor electrode formed in the second contact hole from the second conductive film;
- a hole for partially exposing the third interlayer insulating film at the bottom of the second contact hole, the hole being formed in the first capacitor electrode;

a fourth interlayer insulating film formed over the second wiring, the first capacitor electrode, and the third interlayer insulating film;

a third contact hole formed in a portion of the fourth interlayer insulating film that is in the pixel region, the third contact hole being positioned over the second contact hole and the first capacitor electrode;

a fifth interlayer insulating film formed over the fourth interlayer insulating film and in the third contact hole;

a hole for partially exposing the drain electrode positioned under the bottom of the third contact hole, the hole being formed in portions of the third and fifth interlayer insulating films that are at the bottom of the third contact hole; and

a third wiring formed from a third conductive film over a portion of the fifth interlayer insulating film that is in the driver circuit region;

a second capacitor electrode formed in the third contact hole from the third conductive film electrically connected to the drain electrode,

wherein a first capacitor element and a second capacitor element are formed in the first through third contact holes, the first capacitor element being composed of the drain electrode, the third interlayer insulating film as a dielectric, and the first capacitor electrode, the second capacitor element being composed of the first capacitor electrode, the fifth interlayer insulating film as a dielectric, and the second capacitor electrode.

26. (Original) A semiconductor device according to claim 25, further comprising:

a sixth interlayer insulating film formed over the third wiring, the second capacitor electrode, and the fifth interlayer insulating film; and a pixel electrode formed over a portion of the fifth interlayer insulating film that is in the pixel region and is electrically connected to the second capacitor electrode.